

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
26 May 2005 (26.05.2005)

PCT

(10) International Publication Number  
**WO 2005/046614 A2**

- (51) International Patent Classification<sup>7</sup>: **A61K**
- (21) International Application Number:  
PCT/US2004/037810
- (22) International Filing Date:  
12 November 2004 (12.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/519,427 12 November 2003 (12.11.2003) US
- (71) Applicant (for all designated States except US): **THE-  
RION BIOLOGICS CORPORATION** [US/US]; 76  
Rogers Street, Cambridge, MA 02142 (US).
- (72) Inventors; and  
(75) Inventors/Applicants (for US only): **PANICALI, Den-  
nis, L.** [US/US]; 114 Nonset Path, Acton, MA 01720 (US).  
**MAZZARA, Gail, P.** [US/US]; 22 Rangeley Road, Win-  
chester, MA 01890 (US). **GRITZ, Linda, R.** [US/US]; 3  
Emerson Street, Somerville, MA 02143 (US).
- (74) Agents: **EISENSTEIN, Ronald, I.** et al.; Nixon Peabody  
LLP, 100 Summer Street, Boston, MA 02110 (US).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

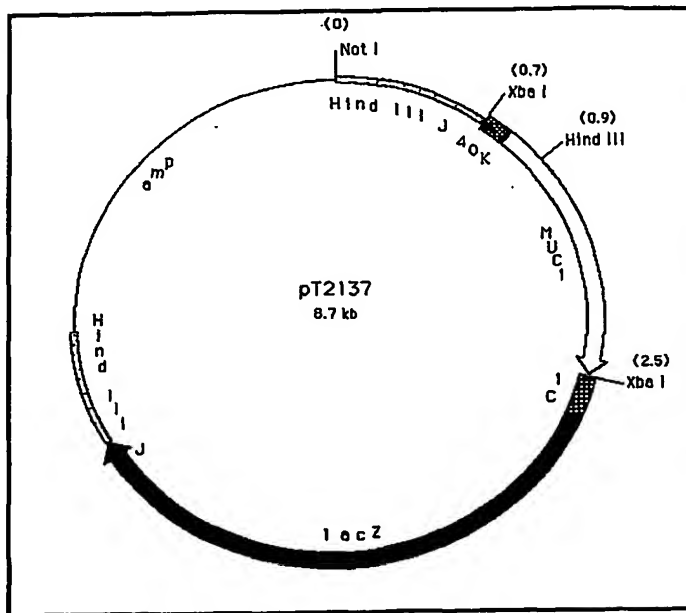
(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,  
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished  
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: **SYSTEM FOR TREATING AND PREVENTING BREAST CANCER**



(57) Abstract: The present invention is directed to a system for treating individuals at risk of or suffering from breast cancer. The system comprises administering to the individual a recombinant poxvirus, where the poxvirus contains in a foreign nucleic acid encoding at least one breast cancer antigen.

**Restriction Endonuclease Map of Plasmid pT2137**